PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference 2003P12914WO | | FOR FURTHER ACT | ION | See Form PCT/IPEA/416 | | |
|--|---|--|-------------------------|--|--|--|
| International application No. | | International filing date (| day/month/year) | Priority date (day/month/year) | | |
| PCT/EP2004/051766 | | 11.08.2004 | | 12.11.2003 | | |
| Internati | onal Patent Classification (IPC) | or national classification and IPC | • | | | |
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| | | H02P6/08 | H02P6/14 | | | |
| | Applicant SIEMENS AKTIENGESELLSCHAFT | | | | | |
| | | | | | | |
| 1. | | preliminary examination report d to the applicant according to A | | International Preliminary Examining Authority | | |
| 2. | This REPORT consists of a tot | al of | sheets, including | g this cover sheet. | | |
| 3. | This report is also accompanied | d by ANNEXES, comprising: | | | | |
| | a. (sent to the applica | nt and to the International Burea | u) a total of 6 | sheets, as follows: | | |
| | sheets contain | | ~ | mended and are the basis for this report and/or le 70.16 and Section 607 of the Administrative | | |
| | Instructions). | supersede earlier sheets, but whi | ch this Authority cons | siders contain an amendment that goes beyond | | |
| | the disclosure | | | in item 4 of Box No. I and the Supplemental | | |
| | Box. | | | | | |
| | b (sent to the Interna | tional Bureau only) a total of (ind | licate type and number | r of electronic carrier(s)) | | |
| | , containing a sequence listing and/or tables | | | | | |
| | related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions). | | | | | |
| 4. | This report contains indication | s relating to the following items: | | | | |
| | Box No. I Basis | of the report | | | | |
| | Box No. II Prior | ity | | | | |
| | Box No. III Non- | establishment of opinion with reg | gard to novelty, invent | ive step and industrial applicability | | |
| | Box No. IV Lack | of unity of invention | | | | |
| | BON 110. 1 | oned statement under Article 35(2 ons and explanations supporting s | | lty, inventive step or industrial applicability; | | |
| | Box No. VI Certa | in documents cited | | | | |
| | Box No. VII Certa | in defects in the international app | lication | | | |
| | Box No. VIII Certa | in observations on the internation | nal application | | | |
| Date of | submission of the demand | Da | te of completion of thi | is report | | |
| | | | | | | |
| Name and mailing address of the IPEA/EP | | | thorized officer | | | |
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| | | | | | | |
| Facsimile No. | | | lephone No. | | | |

International application No.

PCT/EP2004/051766

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

| Вох | No. I | 1 | Basis of the report | | | |
|-----|-------------|-----------|--|------------------------------------|----------|---------------------------------|
| 1. | | | the language, this report is based on the internation r this item. | nal application in the language in | which it | was filed, unless otherwise |
| | | - | ort is based on translations from the original langua the language of a translation furnished for the purp | | | , |
| | | int | ernational search (Rule 12.3 and 23.1(b)) | | | |
| | | pul | blication of the international application (Rule 12.4 |) | | |
| | | int | ernational preliminary examination (Rule 55.2 and/ | or 55.3) | | |
| 2. | recei | | othe elements of the international application, this ce in response to an invitation under Article 14 ar | | | |
| | | the inter | national application as originally filed/furnished | | | |
| | \boxtimes | the descr | ription: | | | |
| | | pages | 2-4,6-14 | | | as originally filed/furnished |
| | | pages* | 1,1a,5 | received by this Authority on | 0f 0 | 4.2005 with letter 4.04.2005 |
| | | pages* | | received by this Authority on | | |
| | \boxtimes | the clain | ns: | | | |
| | | nos. | | | | as originally filed/furnished |
| | | nos.* | | | with a | |
| | | _ | 1–11 | | 14.0 | 4.2005 with letter |
| | | nos.* | | | | |
| | \square | _ | | received by this Authority on _ | | |
| | | the draw | | | | |
| | | sheets | 1/5-5/5 | | | |
| | | sheets* | | · | | |
| | _ | sheets* | | received by this Authority on | | |
| | Ш | a sequen | ice listing and/or any related table(s) - see Supplem | ental Box Relating to Sequence Li | sting. | |
| 3. | | The ame | endments have resulted in the cancellation of: | | | |
| | | the | e description, pages | | | |
| | | the | e claims, nos. | | | |
| | | the | e drawings, sheets/figs | | | |
| | | the | e sequence listing (specify): | | | |
| | | an | | | | |
| 4. | | | ort has been established as if (some of) the amend e been considered to go beyond the disclosure as fil | ments annexed to this report and | listed b | below had not been made, since |
| | | the | e description, pages | | | |
| | | | e claims, nos. | | | |
| | | | e drawings, sheets/figs | | | |
| | | | e sequence listing (specify): | | | |
| | | | y table(s) related to sequence listing (specify): | | | |
| * | If ite | | es, some or all of those sheets may be marked "supe | erseded." | | |

International application No.
PCT/EP2004/051766

| Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | | | |
|---|----------------------|------------------|------|-----|
| 1. | Statement | | | |
| | Novelty (N) | Claims | 1-11 | YES |
| | | Claims | | NO |
| | Inventive step (IS) | Claims | 1-11 | YES |
| | | Claims | | NO |
| | Industrial applicabi | lity (IA) Claims | 1-11 | YES |
| | | Claims | | NO |
| | | | | |

- 2. Citations and explanations (Rule 70.7)
 - D1: GB-A-2 388 090 (INT RECTIFIER CORP), 5 November 2003 (2003-11-05)

Object

The application relates to a process for controlling an electromotor, in which process a commutation angle is continuously varied for phase commutation purposes.

Differentiating technical features

Document D1 is regarded as the best prior art. It describes a process for controlling an electromotor, in which process a commutation angle is varied for phase commutation purposes in that a variable angle is added to the commutation angle (page 8, lines 11-16).

The application contains two independent claims, a process claim (claim 1) and a device claim (claim 10). Claim 1 differs from the prior art by its characterising features. Claim 10 corresponds to claim 1.

Claims 1-11 are thus novel.

Problem addressed

The invention addresses the problem defined on page 2, line 26 to page 3, line 12, of the application. The

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/051766

| Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; |
|-----------|--|
| | citations and explanations supporting such statement |

continuous variation of the commutation angle avoids, in particular, irregularities in the operation of the motor.

The technical solution defined in claim 1 is an alternative to the solution in D1. This solution is not obvious to a person skilled in the art.

Claims 1-11 are thus inventive.